REMARKS

Claims 1, 5-7 and 10 are currently pending in this application and amended herein with claim 3 cancelled. No new matter is added by these amendments.

On the merits, independent claim 10 is rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Published Patent Application No. 2000/0046207 to Isonuma. Claims 1-9 [sic] are rejected under 35 U.S.C. § 103(a) as unpatentable over Shioda in view of U.S. Published Patent Application No. 2002/0186719 to Spires.

With respect to claim 10, it is amended herein to recite "wherein, in regard to two nodes provided in each of the two bidirectional line switched ring networks, one node being connected to the lower-order work channel while the other node being connected to the lower-order protection channel, as expected source node IDs to be transmitted from a source node to the lower-order work channel, an ID of a source node transmitting to the own node, and an ID of a source node transmitting to the node connected to the lower-order protection channel are set, and wherein the two expected source node IDs are collated with a received node ID, and when the received node ID does not match with any of the two expected source node IDs, optical transmission equipment in the node on the reception side prevents a misconnection in the event of a failure by inserting an alarm indication signal." The feature is based on Fig. 14, and page 26, lines 6-14.

As best understood, Isonuma et al. teaches two bidirectional line switched ring networks as shown in Fig. 29, and discloses a Squelch determining method using a Squelch Table and Far end Node ID, similar to what is shown in the background of the invention of the present application. However, Isonuma fails to teach the above-identified features, including regarding the two bidirectional line switched ring networks, "as expected source node IDs to be transmitted

from a source node to the lower-order work channel, <u>an ID of a source node transmitting to the own node, and an ID of a source node transmitting to the node connected to the lower-order protection channel are set,</u> and wherein <u>the two expected source node IDs are collated with a received node ID, and when the received node ID does not match with any of the two expected source node IDs,</u> optical transmission equipment in the node on the reception side prevents a misconnection in the event of a failure by inserting an alarm indication signal" as recited in claim 10. Accordingly, it is submitted that claim 10 patentably distinguishes over Isonuma and should be allowed. Withdrawal of the rejection is requested.

As to the rejection of claims 1, 5, and 7-9 under 35 U.S.C. § 103(a), as best understood, the relied upon portions of Shinoda teach STS squelch operation in a STS BLSR, and that Z4 and Z5 bytes, which are located in an unused overhead OH, are used to transmit a source ID, and the source ID is compared with an expected ID at a receiving node to perform STS Path Squelch operation.

However, the present invention, as recited in claim 1 is directed to a VT Path Squelch in VT BLSR, wherein squelch operation is performed by using a vacant frame byte of a V3 byte, which is VT Path OH. In the office action it is noted that Shinoda does not discloses expressly teach that the transmission-side node ID is transmitted using a V3 byte, and wherein, using the V3 bytes for three frames, the transmission-side node ID and a channel ID are additionally transmitted to each VT channel. For this reason the office action asserts that Spires, allegedly from the same field of endeavor, teaches a framing technique to be used on an optical network, where a transmission-side node ID is transmitted using a V3 byte (paragraphs 40-41), wherein using the V3 bytes for three frames, the transmission-side node ID and a channel ID are

additionally transmitted to each VT channel, so that the time slot interchange(TSI) of the VT

channel is enabled in a path-through node(paragraphs 2-3).

However, in spite of such statements in the office action, it is respectfully submitted that

the relied upon portions of Spires fail to teach a ring network in which a plurality of nodes are

connected in a ring form. Thus it is submitted that the relied upon portions of the reference fails

to teach either a path-through node or a time slot interchange (TSI) of the VT channel in the

path-through node. Accordingly, it would not have been obvious for a person of ordinary skill in

the art at the time of invention to implement a bidirectional line switched ring network as defined

in claim 1 by applying the teachings of Spires to the BLSR network of Shioda et al.

With respect to Claim 5, it is dependent on claim 1, and should be allowed for the same

reasons as claim 1.

Further, as best understood, in the paragraph of col. 9, lines 1-14, Shioda teaches a

mapping table provided at each node, and each mapping table stores information, which

indicates for example, only that the time slot #1 of the node A is to be added, the time slot #5 of

the node B is to be passed through, and the data entering the node D at the time slot #23 is to be

dropped at the time slot # 23. Accordingly, it is submitted that Shioda fails to teach "the time

slot interchange (TSI) is enabled in the pass-through node, using the first to sixth bits of a H4

byte of the virtual tributary(VT) super frame as flag bits to expand a channel ID," as recited in

claim 5, thus claim 5 is allowable.

As to claim 6, it recites V4 byte in place of V3 in claim 1, and should be allowed for at

least the same reasons as claim 1 above. Finally, independent claim 7 recites a bidirectional line

switched ring network using H3 bytes in palace of V3 of claim 1, and should be allowed for at

least the same reasons as claim 1 above.

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Accordingly, it is submitted that independent claims 1, 7 and 10 patentably distinguish over the relied upon portions of the cited references and are allowable. Claims 5 and 6, which depend from claim 1 should be allowed therewith.

Conclusion

In view of the remarks set forth above, this application is in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper, not fully covered by an enclosed check, may be charged on Deposit Account 50-1290.

Respectfully submitted,

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